



Sequence listing

<110> SHANGHAI CANCER INSTITUTE

<120> A HUMAN TUMOR-ASSOCIATED GENE CT120 ON CHROMOSOME 17P 13.3 REGION AND PROTEIN ENCODED BY IT

<130> 024832pc

<140> US 10/536,772

<141> 2005-05-26

<150> CN 02150730.9

<151> 2002-11-27

<160> 13

<170> PatentIn version 3.1

<210> 1

<211> 2145

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (91)..(861)

<223>

<400> 1

```
cggagggttg aaatcgcgcg gccggggccgg ggcgcgccga gccgaaccga gccacgcggc 60
gccagcgagg cggccggacc cgcagccccc atg ctg ctg acg ctg gcc ggg ggc 114
Met Leu Leu Thr Leu Ala Gly Gly
1 5
gcg ctc ttc ttc ccg ggg ctc ttc gcg ctc tgc acc tgg gcg ctg cgc 162
Ala Leu Phe Phe Pro Gly Leu Phe Ala Leu Cys Thr Trp Ala Leu Arg
10 15 20
cac tcc cag ccc gga tgg agc cgc acc gac tgc gtg atg atc agc acc 210
His Ser Gln Pro Gly Trp Ser Arg Thr Asp Cys Val Met Ile Ser Thr
25 30 35 40
agg ctg gtt tcc tgc gtg cac gcc gtg ctg gcc acc ggc tgc ggg atc 258
Arg Leu Val Ser Ser Val His Ala Val Leu Ala Thr Gly Ser Gly Ile
45 50 55
gtc atc att cgc tcc tgc gac gac gtg atc acc ggc agg cac tgg ctt 306
Val Ile Ile Arg Ser Cys Asp Asp Val Ile Thr Gly Arg His Trp Leu
60 65 70
gcc cgg gaa tat gtg tgg ttt ctg att cca tac atg atc tat gac tgc 354
Ala Arg Glu Tyr Val Trp Phe Leu Ile Pro Tyr Met Ile Tyr Asp Ser
75 80 85
tac gcc atg tac ctc tgt gaa tgg tgc cga acc aga gac cag aac cgt 402
Tyr Ala Met Tyr Leu Cys Glu Trp Cys Arg Thr Arg Asp Gln Asn Arg
90 95 100
gcg ccc tcc ctc act ctt cga aac ttc cta agt cga aac cgc ctc atg 450
Ala Pro Ser Leu Thr Leu Arg Asn Phe Leu Ser Arg Asn Arg Leu Met
105 110 115 120
atc aca cat cat gcg gtc att ctc ctt gtc ctt gtg cca gtc gca cag 498
Ile Thr His His Ala Val Ile Leu Leu Val Leu Val Pro Val Ala Gln
125 130 135
agg ctc cgg gga gac ctt ggg gac ttc ttt gtc ggc tgc atc ttc acg 546
Arg Leu Arg Gly Asp Leu Gly Asp Phe Phe Val Gly Cys Ile Phe Thr
140 145 150
gca gaa ctg agc act ccg ttt gtg tgc ctg ggc agg gtt ctg att cag 594
Ala Glu Leu Ser Thr Pro Phe Val Ser Leu Gly Arg Val Leu Ile Gln
155 160 165
cta aag cag cag cac acc ctt ctg tac aag gtg aat gga atc ctc acg 642
Leu Lys Gln Gln His Thr Leu Leu Tyr Lys Val Asn Gly Ile Leu Thr
170 175 180
ctg gcc acc ttc ctt tcc tgc cgg atc ctt ctc ttc ccc ttc atg tac 690
Leu Ala Thr Phe Leu Ser Cys Arg Ile Leu Leu Phe Pro Phe Met Tyr
```

185		190		195		200	
tgg tcc tat ggc cgc	cag cag gga cta	agc ctg ctc caa gta	ccc ttc	738			
Trp Ser Tyr Gly Arg	Gln Gln Gly Leu	Ser Leu Leu Gln Val	Pro Phe				
	205	210	215				
agc atc cca ttc tac tgc aac gtg gcc	aat gcc ttc ctc gta gct cct	786					
Ser Ile Pro Phe Tyr Cys Asn Val	Ala Asn Ala Phe Leu Val	Ala Pro					
	220	225	230				
cag atc tac tgg ttc tgt ctg ctg tgc	agg aag gca gtc cgg ctc ttt	834					
Gln Ile Tyr Trp Phe Cys Leu Leu Cys	Arg Lys Ala Val Arg Leu Phe						
	235	240	245				
gac act ccc caa gcc aaa aag gat gcc	taaatgctcc tgggagtcag	881					
Asp Thr Pro Gln Ala Lys Lys Asp Gly							
	250	255					
gcgcagcctc acaccagctg cctcctccac	tcagcattcc atggaccaa	ttgtgccctg	941				
ggtagcctca gactttgggt attgataagc	cgatggattt gagtttttct	aaagaatatt	1001				
catattacct cctttttcta acttggccta	tttgcaaacg cacttttgta	gtaacaacta	1061				
ttgggtcctg tcagacctcc acggacagca	aagtggtttt aatgcaagcc	caaggatcct	1121				
tcttaagggtc ttatctcaag agctctggga	ggtggaagca tggggtggga	tcggtggacc	1181				
aggggtggtaa gtgtctgcac atctgcctgt	ccctgtatca gcggctaccc	accttccaaa	1241				
ccactcagga cagtaccctg ggcactgggc	ccgcagaagc aagggatgac	ttggttcttg	1301				
gaagtaagt cgtcttgtga cattggcctg	ggacaatcat tgtgggtagg	tagttattga	1361				
tcgtttacta gataacccat tggttctttg	cctcatcctc tcatccatgg	gtcagagttg	1421				
aattcttatg tctatagact tccaatcaga	agtctcactg gtggggctgg	gggtgggggc	1481				
aggcaggagg ccttgatggg aacctgagta	tgtagtgtgg ccaagagatc	agcacaacct	1541				
ttgcaggctg acttgctaag tctgacagt	acaaacttgt gagcttactg	cagtcagtca	1601				
cagaggctgt tctttttcac acacccttc	atgcccggtt tccccatat	ccacatgcag	1661				
agggcgagct cataaaacta caggggaagc	tgaaatgatg gctttggtag	ctgtttactg	1721				
ggtaacccca ctgtgacact gtccttttca	tgtgatgtgg aaacctactt	ctgtcctcca	1781				
aaccatgaaa tgtgtcatct agactgcaga	gtactcagat gctttgcctc	ccgatatgcc	1841				
agagcttgtg gtccaaagcc cattcctgtg	tgtccgtcct gccatttagc	cacagaaggc	1901				
tgcggagtga ggcggcagct agcctggcca	gtggctgtcc cgtggaccga	cacctgcgcc	1961				
cccttctgca agcaggattt tctggtgcca	acactcattc atcattccc	atcaactagg	2021				
atgaatttaa gactgtgcta ccatgtgttc	tcaagtggta gtttaaaaag	tggattttta	2081				
aagtgccttt caattgtctg tgaacgtcta	aaggactgat ttgtctcaa	aaaaaaaaa	2141				
aaaa			2145				

<210> 2
 <211> 257
 <212> PRT
 <213> Homo sapiens

<400> 2
 Met Leu Leu Thr Leu Ala Gly Gly Ala Leu Phe Phe Pro Gly Leu Phe
 1 5 10 15
 Ala Leu Cys Thr Trp Ala Leu Arg His Ser Gln Pro Gly Trp Ser Arg
 20 25 30
 Thr Asp Cys Val Met Ile Ser Thr Arg Leu Val Ser Ser Val His Ala
 35 40 45
 Val Leu Ala Thr Gly Ser Gly Ile Val Ile Ile Arg Ser Cys Asp Asp
 50 55 60
 Val Ile Thr Gly Arg His Trp Leu Ala Arg Glu Tyr Val Trp Phe Leu
 65 70 75 80
 Ile Pro Tyr Met Ile Tyr Asp Ser Tyr Ala Met Tyr Leu Cys Glu Trp
 85 90 95
 Cys Arg Thr Arg Asp Gln Asn Arg Ala Pro Ser Leu Thr Leu Arg Asn
 100 105 110
 Phe Leu Ser Arg Asn Arg Leu Met Ile Thr His His Ala Val Ile Leu
 115 120 125
 Leu Val Leu Val Pro Val Ala Gln Arg Leu Arg Gly Asp Leu Gly Asp
 130 135 140
 Phe Phe Val Gly Cys Ile Phe Thr Ala Glu Leu Ser Thr Pro Phe Val
 145 150 155 160
 Ser Leu Gly Arg Val Leu Ile Gln Leu Lys Gln Gln His Thr Leu Leu
 165 170 175
 Tyr Lys Val Asn Gly Ile Leu Thr Leu Ala Thr Phe Leu Ser Cys Arg
 180 185 190
 Ile Leu Leu Phe Pro Phe Met Tyr Trp Ser Tyr Gly Arg Gln Gln Gly
 195 200 205
 Leu Ser Leu Leu Gln Val Pro Phe Ser Ile Pro Phe Tyr Cys Asn Val
 210 215 220

Ala	Asn	Ala	Phe	Leu	Val	Ala	Pro	Gln	Ile	Tyr	Trp	Phe	Cys	Leu	Leu
225					230					235					240
Cys	Arg	Lys	Ala	Val	Arg	Leu	Phe	Asp	Thr	Pro	Gln	Ala	Lys	Lys	Asp
				245					250					255	

Gly

<210> 3
 <211> 25
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(25)
 <223> primer

<400> 3
 gtgctgactgg cacaaggaca aagag

25

<210> 4
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(23)
 <223> primer

<400> 4
 cgaatgatga cgatccccga gcc

23

<210> 5
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(22)
 <223> primer

<400> 5
 ccgatgctgc tgacgctggc cg

22

<210> 6
 <211> 25
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(25)
 <223> primer

<400> 6
 tgttggcacc agaaaatcct gcttg

25

<210> 7
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> primer

<400> 7

aagtactccg tgtggatcgg 20

<210> 8
<211> 20
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<222> (1)..(20)
<223> primer

<400> 8
tcaagttggg ggacaaaaag 20

<210> 9
<211> 25
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<222> (1)..(25)
<223> primer

<400> 9
gtgcgactgg cacaaggaca aagag 25

<210> 10
<211> 23
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<222> (1)..(23)
<223> primer

<400> 10
ggggatcgct atcattcgct cct 23

<210> 11
<211> 15
<212> PRT
<213> Artificial

<220>
<221> MISC_FEATURE
<222> (1)..(15)
<223> oligopeptide corresponding to C-terminus of CT120 protein

<400> 11

Cys Arg Lys Ala Val Arg Leu Phe Asp Thr Pro Gln Ala Lys Lys
1 5 10 15

<210> 12
<211> 20
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<222> (1)..(20)
<223> primer

<400> 12
atgctgctga cgctggccgg 20

<210> 13

<211> 20
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> primer

<400> 13
 ttagccatcc tttttggctt

20

<210> 14
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 14

```

Met Ala Ser Thr Ala Gly Tyr Ile Val Ser Thr Ser Cys Lys His Ile
1      5      10      15
Ile Asp Asp Gln His Trp Leu Ser Ser Ala Tyr Thr Gln Phe Ala Val
20      25      30
Pro Tyr Phe Ile Tyr Asp Ile Tyr Ala Met Phe Leu Cys His Trp His
35      40      45
Lys His Gln Val Lys Gly His Gly Gly Asp Asp Gly Ala Ala Arg Ala
50      55      60
Pro Gly Ser Thr Trp Ala Ile Ala Arg Gly Tyr Leu His Lys Glu Phe
65      70      75      80
Leu Met Val Leu His Ala Ala Met Val Leu Val Cys Phe Pro Leu
85      90      95
Ser Val Val Trp Arg Gln Gly Lys Gly Asp Phe Phe Leu Gly Cys Met
100     105     110
Leu Met Ala Glu Val Ser Thr Pro Phe Val Cys Leu Gly Lys Ile Leu
115     120     125
Ile Gln Tyr Lys Gln Gln His Thr Leu Leu His Lys Val Asn Gly Ala
130     135     140
Leu Met Leu Leu Ser Phe Leu Cys Cys Arg Val Leu Leu Phe Pro Tyr
145     150     155     160
Leu Tyr Trp Ala Tyr Gly Arg His Ala Gly Leu Pro Leu Leu Ala Val
165     170     175
Pro Leu Ala Ile Pro Ala His Val Asn Leu Gly Ala Ala Leu Leu Leu
180     185     190
Ala Pro Gln Leu Tyr Trp Phe Phe Leu Ile Cys Arg Gly Ala Cys Arg
195     200     205
Leu Phe Trp Pro Arg Ser Arg Pro Pro Pro Ala Cys Gln Ala Gln Asp
210     215     220

```

<210> 15
 <211> 275
 <212> PRT
 <213> Homo sapiens

<400> 15

```

Met Leu Thr Pro Met Val Ala Gly Gly Val Val Phe Pro Gly Leu Phe
1      5      10      15
Leu Leu Ser Lys Asn Thr Leu Gln Arg Leu Pro Gln Leu Arg Trp Glu
20      25      30
Glu Ala Asp Ala Val Ile Val Ser Ala Arg Leu Val Ser Ser Val Gln
35      40      45
Ala Ile Met Ala Ser Thr Ala Gly Tyr Ile Val Ser Thr Ser Cys Lys
50      55      60
His Ile Ile Asp Asp Gln His Trp Leu Ser Ser Ala Tyr Thr Gln Phe
65      70      75      80
Ala Val Pro Tyr Phe Ile Tyr Asp Ile Tyr Ala Met Phe Leu Cys His
85      90      95
Trp His Lys His Gln Val Lys Gly His Gly Gly Glu Asp Gly Thr Pro
100     105     110

```

Arg Ala Leu Gly Ser Thr Trp Ala Val Val Arg Gly Tyr Leu His Lys
 115 120 125
 Glu Phe Leu Met Val Leu His His Ala Ala Met Val Leu Val Cys Phe
 130 135 140
 Pro Leu Ser Val Val Trp Arg Gln Gly Lys Gly Asp Phe Phe Leu Gly
 145 150 155 160
 Cys Met Leu Met Ala Glu Val Ser Thr Pro Phe Val Cys Leu Gly Lys
 165 170 175
 Ile Leu Ile Gln Tyr Lys Gln Gln His Thr Leu Leu His Lys Val Asn
 180 185 190
 Gly Ala Leu Met Leu Leu Ser Phe Leu Cys Cys Arg Val Leu Leu Phe
 195 200 205
 Pro Tyr Leu Tyr Trp Ala Tyr Gly Arg His Ala Gly Leu Pro Leu Leu
 210 215 220
 Ser Val Pro Met Ala Ile Pro Ala His Val Asn Leu Gly Ala Ala Leu
 225 230 235 240
 Leu Leu Ala Pro Gln Leu Tyr Trp Phe Phe Leu Ile Cys Arg Gly Ala
 245 250 255
 Cys Arg Leu Phe Arg Pro Arg Gly Ser Pro Pro Pro Ser Pro Cys Gln
 260 265 270
 Thr Gln Asp
 275

<210> 16
 <211> 353
 <212> PRT
 <213> Homo sapiens

<400> 16

Leu Ala Ile Pro Ser Ser Pro Pro Thr Pro Ser Leu Asn Leu Ala Phe
 1 5 10 15
 Leu Ser Leu Leu Asp Pro Leu Val Ser Leu Pro Gly Phe Lys Ser Pro
 20 25 30
 Cys Leu Pro Gln Trp Trp Leu Gly Gly Trp Cys Ser Pro Asp Ser Ser
 35 40 45
 Ser Tyr Pro Arg Thr Arg Ser Arg Gly Cys Pro Ser Cys Ala Gly Arg
 50 55 60
 Glu Ala Asp Ala Val Ile Val Ser Ala Arg Leu Val Ser Ser Val Gln
 65 70 75 80
 Ala Ile Met Ala Ser Thr Ala Gly Tyr Ile Val Ser Thr Ser Cys Lys
 85 90 95
 His Ile Ile Asp Asp Gln His Trp Leu Ser Ser Ala Tyr Thr Gln Phe
 100 105 110
 Ala Val Pro Tyr Phe Ile Tyr Asp Ile Tyr Ala Met Phe Leu Cys His
 115 120 125
 Trp His Lys His Gln Val Lys Gly His Gly Gly Glu Asp Gly Thr Pro
 130 135 140
 Arg Ala Leu Gly Ser Thr Trp Ala Val Val Arg Gly Tyr Leu His Lys
 145 150 155 160
 Glu Phe Leu Met Val Leu His His Ala Ala Met Val Leu Val Cys Phe
 165 170 175
 Pro Leu Ser Val Val Trp Arg Gln Gly Lys Gly Asp Phe Phe Leu Gly
 180 185 190
 Cys Met Leu Met Ala Glu Val Ser Thr Pro Phe Val Cys Leu Gly Lys
 195 200 205
 Ile Leu Ile Gln Tyr Lys Gln Gln His Thr Leu Leu His Lys Val Asn
 210 215 220
 Gly Ala Leu Met Leu Leu Ser Phe Leu Cys Cys Arg Val Leu Leu Phe
 225 230 235 240
 Pro Thr Cys Thr Gly Pro Thr Gly Ala Thr Leu Ala Cys Pro Cys Ser
 245 250 255
 Gln Cys Pro Trp Pro Ser Cys Ala Thr Ser Thr Trp Ala Arg Thr Ala
 260 265 270
 Pro Arg Thr Gln Leu Tyr Trp Leu Ser Leu Met Cys Arg Gly Asp Cys
 275 280 285
 Gly Leu Phe Arg Pro Arg Ala Pro Thr His Pro Leu Val Arg Pro
 290 295 300
 Arg Thr Glu Ala Arg Pro Trp Asn Pro Pro Pro Pro Ala Pro Val
 305 310 315 320

Glu Thr Val His Trp Gly Asn Gln Cys Val Ser Trp Gly Gly Gly Asp
 325 330 335
 Glu Ser Gln Lys Ser Leu Ser Leu Thr Ala Pro Arg Gln Met Asp Leu
 340 345 350
 Glu

<210> 17
 <211> 257
 <212> PRT
 <213> Mus musculus

<400> 17

Met Leu Leu Thr Leu Ala Gly Gly Ala Leu Phe Phe Pro Gly Leu Phe
 1 5 10 15
 Ala Leu Cys Thr Trp Ala Leu Arg Arg Ser Gln Pro Gly Trp Ser Arg
 20 25 30
 Thr Asp Cys Val Met Ile Ser Thr Arg Leu Val Ser Ser Val His Ala
 35 40 45
 Val Leu Ala Thr Gly Ser Gly Ile Val Ile Ile Arg Ser Cys Asp Asp
 50 55 60
 Val Ile Thr Gly Arg His Trp Leu Ala Arg Glu Tyr Val Trp Phe Leu
 65 70 75 80
 Ile Pro Tyr Met Ile Tyr Asp Ser Tyr Ala Met Tyr Leu Cys Glu Trp
 85 90 95
 Cys Arg Thr Arg Asp Gln Asn Arg Ala Pro Ser Leu Thr Leu Arg Asn
 100 105 110
 Phe Leu Ser Arg Asn Arg Leu Met Ile Thr His His Ala Val Ile Leu
 115 120 125
 Phe Val Leu Val Pro Val Ala Gln Arg Leu Arg Gly Asp Leu Gly Asp
 130 135 140
 Phe Phe Val Gly Cys Ile Phe Thr Ala Glu Leu Ser Thr Pro Phe Val
 145 150 155 160
 Ser Leu Gly Arg Val Leu Ile Gln Leu Lys Gln Gln His Thr Leu Leu
 165 170 175
 Tyr Lys Val Asn Gly Ile Leu Thr Leu Ala Thr Phe Leu Ser Cys Arg
 180 185 190
 Ile Leu Leu Phe Pro Phe Met Tyr Trp Ser Tyr Gly Arg Gln Gln Gly
 195 200 205
 Leu Ser Leu Leu Gln Val Pro Phe Ser Ile Pro Phe Tyr Cys Asn Val
 210 215 220
 Ala Asn Ala Phe Leu Val Ala Pro Gln Ile Tyr Trp Phe Cys Leu Leu
 225 230 235 240
 Cys Arg Lys Ala Val Arg Leu Phe Asp Thr Pro Gln Ala Lys Lys Asp
 245 250 255
 Gly

<210> 18
 <211> 225
 <212> PRT
 <213> Mus musculus

<400> 18

Met Leu Leu Thr Leu Ala Gly Gly Ala Leu Phe Phe Pro Gly Leu Phe
 1 5 10 15
 Ala Leu Cys Thr Trp Ala Leu Arg Arg Ser Gln Pro Gly Trp Ser Arg
 20 25 30
 Thr Asp Cys Val Met Ile Ser Thr Arg Leu Val Ser Ser Val His Ala
 35 40 45
 Val Leu Ala Thr Gly Ser Gly Ile Val Ile Ile Arg Ser Cys Asp Asp
 50 55 60
 Val Ile Thr Gly Arg His Trp Leu Ala Arg Glu Tyr Val Trp Phe Leu
 65 70 75 80
 Ile Pro Tyr Met Ile Tyr Asp Ser Tyr Ala Met Tyr Leu Cys Glu Trp
 85 90 95
 Cys Arg Thr Arg Asp Gln Asn Arg Ala Pro Ser Leu Thr Leu Arg Asn
 100 105 110
 Phe Leu Ser Arg Asn Arg Leu Met Ile Thr His His Ala Val Ile Leu

[illegible]